REMARKS

In view of the fact that the Office Action maintained the restriction requirement, claims 9-40 of the present application have been withdrawn. It is respectfully submitted that the pending claims define allowable subject matter. Claims 1-5 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Pat. No. 6,235,038 to Hunter *et al.* ("Hunter"). Claims 6-8 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Hunter in view of U.S. Pat. No. 6,827,723 to Carson ("Carson"). Claim 41 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Carson in view of U.S. Pat. No. 6,887,245 to Kienzle et al. ("Kienzle"). The Applicant respectfully traverses the outstanding rejections for the reasons set forth hereafter.

35 U.S.C. § 102(b) Rejections

Claims 1-5 were rejected under 35 U.S.C. § 102(b) as being anticipated by Hunter. The Applicant respectfully traverses these rejections.

"A claim is anticipated only if **each and every element** as set forth in the claim is found, either expressly or inherently described, **in a single prior art reference**." *Verdegaal Bros. v. Union Oil Co. of California,* 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987) (emphasis added). "The **identical** invention must be shown in as complete detail as is contained in ... the claim." *Richardson v. Suzuki Motor Co.,* 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989) (emphasis added).

Hunter relates to a system for utilizing and registering at least two surgical navigation systems during stereotactic surgery. The system comprises a first surgical navigation system defining a first patient space, a second surgical navigation system defining a second patient

space, and a translation device to register the coordinates of the first patient space to the coordinates of the second patient space. The translation device comprises a rigid body, at least one component for a first navigation system placed in or on the rigid body, and at least one component for a second navigation system placed in or on the rigid body, in known relation to the at least one component for the first navigation system. The translation device is positioned in a working volume of each of the at least two navigation systems. Hunter at Abstract.

The Applicant respectfully submits that Hunter does not teach or suggest all of the limitations of claim 1, and, therefore, claims 1-5 are not anticipated by Hunter. First, Hunter does not teach or suggest the following limitations recited in claim 1:

> ***"said third localizing device communicating with said first localizing device at said second fixator and said second localizing device at said first fixator communicating with said first localizing device at said second fixator such that the position of said second localizing device at said first fixator can be determined relative to the position of said third localizing device proximate said third point"***
>
> ***"said first localizing device on said first fixator communicates with said second localizing device on said instrument in order that the position of said second localizing device on said instrument can be determined relative to said first localizing device on said first fixator and to said third localizing device proximate said third point"***

In other words, the third localizing device communicates with the first localizing device, the second localizing device communicates with the first localizing device, and the first localizing device communicates with the second localizing device. While Hunter may disclose "optical elements" 20, 70, and 85 and translation devices, nowhere does Hunter teach or suggest that the optical devices on any of the translation devices communicate with each other as recited in the claim 1 (*e.g.*, that optical element 85 communicates with optical element 20, that optical element

70 communicates with optical element 20, and that optical element 20 communicates with optical element 70) -- let alone that the optical elements communicate with each other so that their relative positions to each other can be determined.

The Office Action asserts that Hunter discloses a localizing device "that . . . is capable of communicating with other localizing devices directly or indirectly such that its position relative to the other localizing device(s) is known (col. 5, lines 9-15)." *See* February 5, 2010 Office Action at 3. However, nowhere does Hunter actually state, explicitly or implicitly, that the optical elements 20, 70, 85 are capable of communicating with each other, either directly or indirectly, let alone that they actually do communicate with each other. As Hunter does not teach or suggest all of the elements recited in claim 1, let alone as the elements are arranged in claim 1, Hunter does not anticipate claims 1-5. *See Connell v. Sears, Roebuck & Co.*, 722 F.2d 1542, 1548 (Fed. Cir. 1983) ("Anticipation requires the presence in a single prior art disclosure of all elements of a claimed invention arranged as in the claim.") (emphasis added).

With respect to dependent claim 4, Hunter does not teach or suggest "a computer system that monitors the communications between said first, second, and third localizing devices and calculates their relative positions." While Hunter may disclose a computer system 50 that indicates the current position of a medical instrument 60, the computer system 50 receives signals from the optical receiving array 40. *See* Hunter at 5:23-27. The computer system 50 does not monitor communications between the optical elements (*e.g.*, 20, 70, 85) – not least because, as discussed above, the optical elements do not communicate with each other. Therefore, Hunter does not teach or suggest "a computer system that monitors the

communications between said first, second, and third localizing devices and calculates their relative positions" and does not anticipate claim 4.

35 U.S.C. § 103(a) Rejections

Claims 6-8

Claims 6-8 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Hunter in view of Carson. The Applicants respectfully traverse these rejections.

In order for a *prima facie* case of obviousness to be established, the MPEP states the following:

> The key to supporting any rejection under 35 U.S.C. 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious. The Supreme Court in KSR International Co. v. Teleflex Inc., 82 USPQ2d 1385, 1396 (2007) noted that the analysis supporting a rejection under 35 U.S.C. 103 **should be made explicit**. The Federal Circuit has stated that "rejections on obviousness **cannot be sustained with mere conclusory statements**; instead, there must be some articulated reasoning **with some rational underpinning** to support the legal conclusion of obviousness."

See the MPEP at § 2142, citing *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006), and *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d at 1396 (quoting Federal Circuit statement with approval). Further, MPEP § 2143.01 states that "the mere fact that references can be combined or modified does not render the resultant combination obvious unless the results would have been predictable to one of ordinary skill in the art" (citing *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385, 1396 (2007)).

Additionally, if a *prima facie* case of obviousness is not established, the Applicant is

under no obligation to submit evidence of nonobviousness:

> The examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. If the examiner does not produce a *prima facie* case, the applicant is under no obligation to submit evidence of nonobviousness.

See MPEP at § 2142.

"To establish *prima facie* obviousness of a claimed invention, **all** the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974)." *See* MPEP at 2143.03 (emphasis added). Further, "'**[a]ll** words in a claim **must** be considered in judging the patentability of that claim against the prior art.' *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA)." *See id.* (emphasis added).

Carson relates to systems and processes for tracking anatomy, instrumentation, trial implants, implants, and references, and rendering images and data related to them in connection with surgical operations, for example unicompartmental knee arthroplasties. These systems and processes use a computer to intra-operatively obtain images of body parts and to register, navigate, and track surgical instruments. Carson at Abstract.

The combination of Hunter and Carson does not teach or suggest all of the limitations of claims 6-8, and therefore claims 6-8 are not obvious over Hunter in view of Carson. As discussed above with respect to claim 1, Hunter does not teach or suggest "said third localizing device communicating with said first localizing device at said second fixator and said second localizing device at said first fixator communicating with said first localizing device at said second fixator such that the position of said second localizing device at said first fixator can be determined relative to the position of said third localizing device proximate said third point" or

"said first localizing device on said first fixator communicates with said second localizing device on said instrument in order that the position of said second localizing device on said instrument can be determined relative to said first localizing device on said first fixator and to said third localizing device proximate said third point," as recited in claim 1. Likewise, Carson does not teach or suggest these limitations. Therefore, claims 6-8, which depend from claim 1, are not unpatentable over Hunter in view of Carson.

Claim 41

Claim 41 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Carson in view of Kienzle. The Applicant respectfully traverses these rejections.

Kienzle relates to a surgical drill for use with a computer assisted surgery system. At least three localizing emitters are mounted on and integral with each side of the drill housing, the emitters on each side are arranged such that they are visible to a localizing device when that side is facing the localizing device. The emitters on each side are spaced sufficiently apart from one another to provide accurate pose information. In a second embodiment, the emitters are mounted on both sides of a two-sided fin assembly attached to the housing. Kienzle at Abstract.

The combination of Carson and Kienzle does not teach or suggest all of the limitations of claim 41, and therefore claim 41 is not obvious over Carson in view of Kienzle. Neither Carson nor Kienzle teaches or suggests "calculating the position of said third localizing device relative to said first localizing device if said difference is less than a predetermined threshold . . . and indicating an error if said difference is greater than said predetermined threshold." The Office Action acknowledges that Carson does not teach or suggest this limitation. *See* February 5, 2010

Office Action at 6. Kienzle also fails to teach or suggest this limitation. Kienzle discloses a assigning a reference frame with an axis parallel to the axis of rotation of a drill so that the orientation and location of the reference frame can be compared to the orientation and location of the bore of the drill guide and the difference can be reported to the surgeon by alarm or signal. *See* Kienzle at 6:12-20. In other words, Kienzle discloses reporting a difference between the orientation of a reference frame axis and a drill such that the drill bit is operated in the proper orientation. Kienzle does not disclose calculating the position of localizing devices relative to each other to determine if the difference is less than a predetermined threshold and then indicating an error if the difference between the positions of two localizing devices is less than a predetermined threshold. Indeed, the alarm disclosed in Kienzle has nothing to do with the calculating positions of localizing devices relative to each other or predetermined thresholds for such positions at all. Therefore, for at least these reasons, the combination of Carson and Kienzle does not teach or suggest all of the limitations of claim 41, and thus claim 41 is not obvious over Carson in view of Kienzle.

In general, the Office Action makes various statements regarding the pending claims and the cite references that are now moot in light of the above. Thus, the Applicant will not address such statements at the present time. The Applicant expressly reserves the right, however, to challenge such statements in the future should the need arise (*e.g.*, if such statement should become relevant by appearing in a rejection of any current or future claim).

The Applicant respectfully submits that the Office Action has not established a *prima facie* case of anticipation or obviousness with respect to any of the pending claims for at least the reasons discussed above and requests that the outstanding rejections be reconsidered and withdrawn. If the Examiner has any questions or the Applicant can be of any assistance, the Examiner is invited to contact the Applicant.

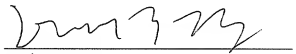
If the Examiner has any questions or if the Applicant can be of any assistance, the Examiner is invited and encouraged to contact the Applicant at the number below.

The Commissioner is authorized to charge any necessary fees or credit any overpayment to the Deposit Account of McAndrews, Held & Malloy, Account No. 13-0017.

Respectfully submitted,

McANDREWS, HELD & MALLOY, LTD.

Date: February 25, 2010

By: 

David Z. Petty
Reg. No. 52,119
Attorney for Applicants

McANDREWS, HELD & MALLOY, LTD.
500 West Madison Street, Suite 3400
Chicago, Illinois 60661
Telephone: (312) 775-8000